

## AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

### LISTING OF CLAIMS

1. (Currently Amended) A method for associating a ~~switched virtual circuit (SVC)~~ connection request in a high speed data network with a network subscriber, the subscriber accessing the high speed data network from a remote access port, which is different from a permanent access port of the subscriber, the method comprising:

receiving a signaling protocol message requesting the ~~SVC~~ connection from the subscriber at ~~an~~ the remote access port;

determining whether the signaling protocol message contains authentication data to authenticate the subscriber; and

when the subscriber is authenticated, associating the ~~SVC~~ connection request with data from an account corresponding to the subscriber and registering an address of the remote access port in the network.

2. (Currently Amended) The method ~~for associating an SVC connection request~~ according to claim 1, further comprising:

retrieving service policies from the subscriber account;

determining from the service policies whether the subscriber is entitled to access the network from the access port, as requested; and

enabling access to the high speed network when the service policies entitle the subscriber to make the requested access.

3. (Canceled)

4. (Currently Amended) The method ~~for associating an SVC connection request according to claim 1, further comprising in which~~ registering ~~an~~ the address of the remote access port in the network ~~by~~ comprises substituting the address of the remote access port for an existing subscriber address corresponding to the permanent access port.

5. (Currently Amended) A method for associating a ~~switched virtual circuit (SVC)~~ connection request from one of a plurality of subscribers at a single access port in a high speed data network, the method comprising:

receiving a signaling protocol message from one of the plurality of subscribers requesting the ~~SVC~~ connection from the access port, the access port being different from an original access port associated with the requesting subscriber, the signaling protocol message comprising a plurality of data fields;

retrieving authentication data from at least one of the plurality of data fields;

comparing the retrieved authentication data with a plurality of network subscriber accounts, including an account of the requesting subscriber; and

associating the ~~SVC~~ connection request with the network requesting subscriber account corresponding to the authentication data; and

registering the access port in the high speed network in association with the requesting subscriber account;

wherein at least one other subscriber of the plurality of subscribers can request simultaneously ~~an SVC a~~ connection from the same access port.

6. (Currently Amended) The method ~~for associating an SVC connection request according to claim 5, further comprising~~ in which the registering comprises:

retrieving from a second one of the plurality of data fields a network access port address corresponding to the access port; and

changing a registration address associated with the network requesting subscriber account from an original access port address to the network access port address.

7. (Currently Amended) The method ~~for associating an SVC connection request according to claim 6, further comprising:~~

receiving at least one connection request from another user of the high speed network, the request directed to the requesting subscriber; and

terminating the at least one connection request to the changed ~~registration~~ address.

8. (Currently Amended) A method for associating a network policy with a subscriber in an asynchronous transfer mode (ATM) network, the network policy including rights for establishing a switched virtual circuit (SVC) connection, the method comprising:

interfacing between the ATM network and the subscriber through an ATM compatible access port, the ATM compatible access port being remote from a first access port previously associated with the subscriber;

receiving at the ATM network a conventional signaling protocol message requesting the SVC connection;

determining whether the signaling protocol message contains a first ~~identification-number~~ identifier associated with the subscriber;

when the signaling protocol message contains the first ~~identification-number~~ identifier, determining whether the signaling protocol message contains a second ~~identification-number~~ identifier that correctly corresponds to the first ~~identification-number~~ identifier;

when the signaling protocol message contains the correctly corresponding second ~~identification-number~~ identifier, retrieving the service policy from an account associated with the first ~~identification-number~~ identifier and the second ~~identification-number~~ identifier;

determining whether the retrieved service policy permits the subscriber to establish an the SVC connection; and

when the retrieved service policy permits the subscriber to establish an the SVC connection, establishing the SVC connection and registering an address of the ATM compatible access port.

9. (Currently Amended) The method ~~for associating a network policy with a subscriber in an ATM network~~ according to claim 8, wherein the first ~~identification-number~~ identifier comprises a publicly known ~~number~~ identifier associated with the subscriber and the second ~~identification-number~~ identifier comprises an encrypted private password associated with the first ~~identification-number~~ identifier.

10. (Currently Amended) The method ~~for associating a network policy with a subscriber in an ATM network~~ according to claim 8, the signaling protocol

message comprising a SETUP message, the first ~~identification number~~ identifier being contained in a first predetermined field of the SETUP message and the second ~~identification number~~ identifier being contained in a second predetermined field of the SETUP message.

11. (Currently Amended) The method ~~for associating a network policy with a subscriber in an ATM network~~ according to claim 8, ~~further comprising registering an address of the ATM compatible access port~~, the registering comprising:

retrieving the ATM compatible access port address from a signaling protocol message;

retrieving from a registration database registration data associated with the first access port of the subscriber, the registration data comprising a predetermined first ATM address; and

replacing the predetermined first ATM address with the ATM compatible access port address retrieved from the signaling protocol message.

12. (Currently Amended) A method for registering ~~an~~ a remote access port of a subscriber in a high speed data network, the method comprising:

establishing a connection between a subscriber terminal and a network registration database in the high speed network, the subscriber terminal accessing the high speed data network via the remote access port;

retrieving from the registration database a preexisting registration address associated with the subscriber; and

replacing the preexisting registration address with an address of the remote access port.

13. (Currently Amended) The method ~~for registering an access port of a subscriber in a high speed data network~~ according to claim 12, further comprising:

terminating connection requests directed to the subscriber at the preexisting registration address to the address of the remote access port, indicated as the registration address associated with the subscriber.

14. (Currently Amended) The method ~~for registering an access port of a subscriber in a high speed data network~~ according to claim 12, further comprising:

prior to retrieving the preexisting registration address ~~associated with the subscriber~~, authenticating the subscriber; and

when the subscriber is successfully authenticated, retrieving service policies corresponding to the subscriber.

15. (Canceled)

16. (Currently Amended) The method ~~for registering an access port of a subscriber in a high speed data network~~ according to claim 15 13, further comprising:

replacing the registration address with the ~~address of the~~ preexisting ~~access port~~ registration address prior to the subscriber disconnecting from the high speed network at the remote access port; and

subsequently terminating connection requests directed to the subscriber at ~~the address of the~~ to the preexisting access port, ~~indicated as the~~ registration address associated with the subscriber.

17. (Currently Amended) A system for processing a switched virtual circuit (SVC) connection request in a high speed data network, the system comprising:

a registration server of the high speed network, that stores at least one ~~identification number~~ identifier associated with a network subscriber;

a database of the high speed network that stores at least one policy defining permission to establish SVC connections; and

at least one switch in the high speed data network that accesses the registration server and the database;

wherein the switch is accessible by ~~at least one~~ a remote access port, connectable to the switch, which enables the network subscriber to interface with the high speed data network from a subscriber terminal; and

wherein the switch receives a protocol message from the subscriber terminal requesting the SVC connection via the remote access port, accesses the registration server to determine whether the protocol message contains valid authentication data, retrieves the at least one policy associated with the network subscriber from the registration database when the protocol message contains valid authentication data, and establishes the SVC connection according to the at least one policy.

18. (Currently Amended) The system ~~for processing the SVC connection request~~ according to claim 17, wherein the remote access port is different from a previously established access port of the network subscriber.

19. (Currently Amended) The system ~~for processing the SVC connection request~~ according to claim 18, wherein the server registers an address of the remote access port in place of an address of the previously established access port associated with the ATM subscriber.

20. (Currently Amended) A system for processing services of a subscriber in an asynchronous transfer mode (ATM) network, including establishing a switched virtual circuit (SVC) connection, the system comprising:

a an ATM network registration server that stores authentication data associated with the subscriber, the authentication data comprising an identification number data and a password;

a an ATM network service database that stores at least one ATM policy ~~comprising for~~ establishing the SVC connection; and

at least one ATM network switch that accesses the registration server and the service database, the ATM switch being connectable to an a remote access port that enables the subscriber to interface with the ATM network from a subscriber terminal;

wherein the registration server determines whether a signaling protocol message requesting the SVC connection, received via the access port, includes the identification number data and the password associated with the subscriber; and



wherein, when the protocol message includes the identification number data and the password, the at least one ATM switch accesses the service database to determine the ATM service policies associated with the subscriber and processes the SVC connection request according to the ATM service policies.

21. (Currently Amended) The system ~~for processing services of a subscriber in an ATM network~~ according to claim 20, wherein the authentication data is contained in at least one of a plurality of predetermined fields of an ATM SETUP message of the signaling protocol message.

22. (Currently Amended) The system ~~for processing services of a subscriber in an ATM network~~ according to claim 21, wherein the registration server stores an address of the remote access port contained in one of a plurality of predetermined fields and substitutes the stored address of the remote access port for a preexisting address of another access port of the subscriber.

23. (Currently Amended) A system for registering ~~an~~ a new access port of a subscriber in an asynchronous transfer mode (ATM) network, the system comprising:

a registration server that stores an original port address as a registration address associated with a subscriber; and

at least one ATM switch in the ATM network that accesses the registration server, the ATM switch being connectable to at least one the new access port that enables the ATM subscriber to interface with the ATM network from a terminal;

wherein the ATM switch interfaces the terminal to the registration server via the new access port; and

wherein, the registration server changes the registration address from the original port address to an address corresponding to the new access port, such that subsequent ATM network connection requests directed to the subscriber are terminated at the terminal via the new access port.

24. (Currently Amended) ~~The system for registering an access port of a subscriber in an ATM network~~ according to claim 23, wherein the registration server stores the address of the new access port in place of the original port address when the ATM subscriber instructs the registration server to register the new access port.

25. (Currently Amended) A computer readable medium for storing a computer program that associates a ~~switched virtual circuit (SVC)~~ connection request in a high speed data network with a network subscriber, the subscriber accessing the high speed data network from a remote access port, which is different from an initial access port of the subscriber, the computer readable medium comprising:

a receiving ~~source~~ code segment that receives a signaling protocol message requesting the ~~SVC~~ connection from the subscriber at ~~an~~ the remote access port;

an authentication ~~source~~ code segment that determines whether the signaling protocol message contains authentication data to authenticate the subscriber; and

an associating ~~source~~ code segment that associates the ~~SVC~~ connection request with data from an account corresponding to the subscriber when the subscriber is authenticated; and

a registering code segment that registers an address of the remote access port in the high speed data network when the subscriber is authenticated.

26. (Currently Amended) The computer readable medium for storing a the computer program according to claim 25, further comprising:

a retrieving ~~source~~ code segment that retrieves service policies from the subscriber account;

a determining ~~source~~ code segment that determines from the service policies whether the subscriber is entitled to access the high speed data network ~~from the access port~~, as requested; and

an enabling ~~source~~ code segment that enables access to the high speed network through the remote access port when the service policies entitle the subscriber to make the requested access.

27. (Canceled)

28. (Currently Amended) The computer readable medium for storing a the computer program according to claim 25, ~~further comprising a~~ wherein the registering ~~source~~ code segment ~~that registers an~~ the address of the remote access port ~~in the network~~ by substituting the address of the remote access port for an existing subscriber address corresponding to the initial access port.

29. (Currently Amended) A computer readable medium for storing a computer program that registers ~~an~~ a remote access port of a subscriber ~~in a high speed data network~~, the computer readable medium comprising:

a connecting ~~source~~ code segment that establishes a connection between a subscriber terminal and a network registration database, the subscriber terminal accessing the high speed data network via the remote access port;

a retrieving ~~source~~ code segment that retrieves from the registration database a registration address associated with the subscriber; and

a replacing ~~source~~ code segment that replaces the registration address with an address of the remote access port.

30. (Currently Amended) The computer readable medium for storing ~~a~~ the computer program according to claim 29, further comprising:

a terminating ~~source~~ code segment that terminates connection requests directed to the subscriber at the address of the ~~network~~ remote access port, indicated as the registration address associated with the subscriber.

31. (Currently Amended) The computer readable medium for storing ~~a~~ the computer program according to claim 29, further comprising:

an authenticating ~~source~~ code segment that, prior to the retrieving ~~source~~ code segment retrieving the registration address associated with the subscriber, authenticates the subscriber; and

a service policy ~~source~~ code segment that retrieves a service policy corresponding to the subscriber when the subscriber is successfully authenticated in accordance with the authenticating ~~source~~ code segment.

32. (Currently Amended) The computer readable medium for storing a the computer program according to claim 29 30, wherein the address of the remote access port is different from an address of a preexisting access port of the subscriber, corresponding to the preexisting registration address.

33. (Currently Amended) The computer readable medium for storing a the computer program according to claim 29 32, ~~further comprising:~~

a wherein the replacing ~~source~~ code segment ~~that~~ replaces the registration address with the address of the preexisting access port prior to the subscriber disconnecting from the high speed network; and

a wherein the terminating ~~source~~ code segment ~~that~~ subsequently terminates connection requests directed to the subscriber at the address of the preexisting access port, indicated as the registration address associated with the subscriber.